**FILED** 

# August 18, 2017

# **INDIANA UTILITY**

#### STATE OF INDIANA

# **REGULATORY COMMISSION**

## **INDIANA UTILITY REGULATORY COMMISSION**

COMPLAINT OF SUGAR CREEK	١	
PACKING CO. FOR REVIEW OF	,	
	,	
WESTERN WAYNE REGIONAL	)	
SEWAGE DISTRICT'S OPERATIONS	)	<b>CAUSE NO. 44948</b>
<b>PURSUANT TO IC § 8-1-30(3)(b).</b>	)	
	)	
RESPONDENT: WESTERN WAYNE	í	
REGIONAL SEWAGE DISTRICT	,	
	,	

RESPONSIVE TESTIMONY of MARTIN WESSLER

IN SUPPORT OF
Respondent
WESTERN WAYNE REGIONAL SEWER DISTRICT

Petitioner's Exhibit MW and Supporting Exhibits MW-1 through MW-13

#### **TESTIMONY OF MARTIN WESSLER**

#### 1. INTRODUCTION

- 1 Q: PLEASE STATE YOUR NAME AND ADDRESS.
- 2 A: My name is Martin A. Wessler. I am a Professional Engineer licensed in the State of Indiana,
- and I am the Chief Executive Officer of Wessler Engineering, Inc. located at 6219 South East
- 4 Street, Indianapolis, Indiana 46227.

6 Q: WHAT DO YOU DO AS CEO AT WESSLER ENGINEERING AND WHAT IS YOUR

### 7 **BACKGROUND?**

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- 8 **A:** As the CEO, I oversee all executive officers and manage approximately 70 employees. I work
- 9 as a consulting engineer for a number of public and private utilities across Indiana and
- specialize in wastewater and water utilities. I graduated with a Bachelor of Science Degree in
- 11 Civil Engineering from Rose-Hulman Institute of Technology in 1987, and have been employed
- at Wessler since October 1988. My background includes project engineering and management
- of planning, design, permitting, bidding assistance, construction administration and
- observation, start-up operations and training assistance. In the instant situation I am and have
- been hired by the Western Wayne Regional Sewer District ("WWRSD" or "District") to assist
- with their planning and engineering needs. I am intimately familiar with the WWRSD plant and
- facilities and many of their engineering issues related to this Complaint case.

1 Q: DO YOU KNOW SUGAR CREEK PACKING COMPANY AND ARE YOU GENERALLY FAMILIAR

2 WITH THE ISSUES RAISED IN THIS COMPLAINT?

- 3 A: Yes. I became aware of Sugar Creek Packing Company when our client, the Western Wayne
- 4 Regional Sewage District, informed us that Sugar Creek would be purchasing the former Really
- 5 Cool Foods processing plant. I'm generally familiar the issues raised by Sugar Creek in their
- 6 Complaint.

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- 8 Q: HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?
- 9 **A:** Yes, I have previously testified before the Commission in a private wastewater utility case. I
- 10 have been actively involved in wastewater utility matters and development issues and
- processes throughout my career. I am generally aware of the IURC, but since a majority of our
- 12 clients, including WWRSD, are utilities that are not directly regulated by the Commission I have
- had limited recent experience with the Commission's processes and procedures.

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- Q: HAVE YOU REVIEWED THE FILINGS OF THE INTERVENORS WAYNE COUNTY AND
- 16 **CAMBRIDGE CITY?**
- 17 **A:** Yes. I am generally familiar with the positions they have taken and the related issues they
- raise from the many meetings I have participated in with representatives of each as well as with
- 19 Sugar Creek personnel and consultants. I have also read newspaper articles, attended related
- 20 meetings, and reviewed accounting and engineering reports and data request exchanges
- 21 related to this proceeding. I have also been assisting WWRSD since 1995, so I am generally

1 familiar with the proposed WWTP expansion project, the Industrial Park lift station project and

the various other options presented to and reviewed by WWRSD before the Board arrived at

their decision to move forward with the WWTP expansion project.

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5 Q: CAN YOU PLEASE SHARE ADITIONAL INFORMATION ABOUT WWRSD INCLUDING THE

NUMBER OF CUSTOMERS IT SERVES, THE CURRENT PLANT CAPACITY AND ITS ABILITY TO

7 PROVIDE SERVICE TO SUGAR CREEK.

8 **A:** Yes. WWRSD was formed in 1974 as a non-profit municipal corporation designed and

created to provide effective and efficient sanitary sewer service to customers in western

Wayne County, Indiana. WWRSD took over the treatment plant and facilities of Cambridge

City and has grown since that time to also serve customers in the towns of Mount Auburn

and Dublin, the Gateway Industrial Park, and several commercial customers outside the

Park. The WWRSD also has an agreement with the Town of Pershing to treat their

wastewater. At present, WWRSD serves around 1,200 to 1,300 customers in Wayne

15 County. As noted above, WWRSD took over the former Cambridge City treatment plant

and collection system and has maintained that treatment facility known as the WWRSD

Wastewater Treatment Plant with a rated average capacity of 0.804 million gallons per day

(mgd) of sewage, and a maximum capacity of 2.00 mgd. Their recorded treated flow for

calendar year 2016 was approximately 0.663 mgd. WWRSD is proud of its service record

and has capably and consistently met its Indiana Department of Environmental

21 Management NPDES permit and treatment requirements. Therefore, I believe WWRSD has

adequate ability and capacity to serve Sugar Creek and all its customers, and has all

2 necessary technical, financial, and managerial capability to continue to serve. Further, I

3 believe WWRSD should be allowed to proceed with the plant expansion and upgrade plans,

which I discuss further below, that WWRSD has been working on since before Sugar Creek

became a customer.

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7 Q: HOW LONG HAS WESSLER ENGINEERING BEEN ASSISTING WWRSD AND WHAT HAS YOUR

8 ROLE BEEN REGARDING THE WWRSD PLANT OPERATIONS, UPGRADES AND DESIGNS OVER

9 THE LAST SEVERAL YEARS?

A: Wessler was engaged by WWRSD in 1995 to assist with sewer system improvements. Since 1995 we have assisted WWRSD with most if not all of its needs regarding engineering and construction for capital projects, plant upgrades, operational issues, and most recently with the design and upgrade needs for the District's treatment plant and collection system. Those efforts began in earnest in 2008, when WWRSD obtained a grant from Wayne County Economic Development Corporation and engaged Wessler to prepare a Preliminary Engineering Report (PER) for the expansion of the existing WWTP to facilitate the new Really Cool Foods (RCF) facility and other anticipated growth in the Industrial Park. We assisted the WWRSD with evaluating and certifying capacity for RCF, and provided operational and engineering assistance during the start-up and eventual shut down of that facility. Following the news in 2013 of Sugar Creek Packing purchasing the shuttered RCF facility, we moved quickly. We presented a WWTP Project update to the District Board in October 2013. We verified that WWRSD qualified for an

Indiana Finance Authority (IFA) State Revolving Fund (SRF) low interest loan for a WWTP 1 expansion project, so we prepared and submitted a financing application to SRF in November 2 2013. We then prepared another PER to meet the State Revolving Fund format guidelines. 3 That PER was submitted in May 2014, and upon SRF review was subsequently amended and 4 approved in December 2014. Following approval of the amended PER, we prepared contract 5 documents, including engineering plans and specifications, for the WWTP expansion project. 6 We submitted the documents to IDEM for approval, and obtained a construction permit from 7 IDEM in October 2015. We continued to meet with Sugar Creek to update them on the WWTP 8 9 expansion project as this project would benefit Sugar Creek's plans and schedule for their future expansion needs. During this same period of time, Sugar Creek was under way with its 10 plant expansions quadrupling the former RCF plant size and constructing its pretreatment 11 system and seeking its IDEM construction permits. Sugar Creek then came to WWRSD twice 12 and requested the District delay its expansion projects. It was during these delays that Sugar 13 Creek engaged Strand to first review the industrial park lift station and then later to evaluate 14 15 the possibility of sending flows to Connersville. Wayne County joined in the latter request and WWRSD accommodated and worked with their representatives to ensure the District 16 considered their requests and we reviewed all necessary information and any practical options. 17 Following over a year of requested delays by Sugar Creek and Wayne County, and after 18 consideration and review of their investigations and options, the District Board then voted to 19 20 proceed with the WWTP expansion project in January 2017 as being the most viable option. We then pursued and obtained approval from SRF in March 2017 to issue the project for public 21

bidding. Following receipt of bids on May 18, 2017, we obtained SRF approval to award the

2 construction contract. However, the District has now been prevented from proceeding to loan

closing with the Indiana Finance Authority due to two main issues; 1) Sugar Creek's refusal to

sign a treatment agreement or Letter of Intent, which is required by SRF (see Exhibit MW-1),

5 and 2) this pending Complaint.

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6 Q: MR. WESSLER, IT APPEARS THAT YOU WERE ENGAGED BY WWRSD WELL BEFORE SUGAR

7 CREEK FIRST CONTACTED THE DISTRICT ABOUT BECOMING A NEW CUSTOMER. WERE YOU

8 DIRECTLY INVOLVED WITH AND ASSISTING THE DISTRICT WITH ADDRESSING THE NEEDS OF

9 ADDING SUGAR CREEK AS A NEW CUSTOMER?

10 **A:** Yes, the District's Board asked me and my firm to assist, advise, and directly communicate

and coordinate with Sugar Creek's representatives starting in 2014 through the present date. I

recall attending meetings with WWRSD and Sugar Creek officials beginning in July 2014 as Sugar

Creek began moving forward with its expansion and improvements to the RCF facility. We met

several times with Sugar Creek over a period of several months to discuss a number of items

including but not limited to 1) the timing of the WWTP expansion and how to coordinate with

Sugar Creek start-up and their future expansion needs, 2) Sugar Creek's pretreatment system

and supporting its IDEM Industrial Waste Permitting process, and 3) construction costs and

contributions. (See Exhibit MW-2)

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Q: PLEASE EXPLAIN WHAT YOU RECALL REGARDING WHAT SUGAR CREEK WANTED AND

### NEEDED AS IT EXPANDED AND OPENED ITS NEW CAMBRIDGE CITY PLANT.

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A: During the meetings mentioned above, Sugar Creek discussed their state of the art 2 processing facility and what it would mean for the County with the proposed number of jobs, 3 tax base, and utility usage. Sugar Creek discussed the "ramp-up" of their operations and 4 resulting wastewater discharges. They asked for flexibility and leniency in "hiccups" and 5 "burps" after they started up, especially with the new processing plant aspects, as the 6 7 pretreatment system would be a biological plant and they would need time for the biological process to stabilize. They explained the reason for the flexibility request was the unknown 8 9 nature of how their various product processing lines would affect their wastewater flows. They also asked for assistance from WWRSD with their IDEM Industrial Waste Permit ("IWP") 10 application and IDEM construction permit application, as they were applying for a modification 11 to the previous RCF IWP. They could save time and start production sooner if they obtained a 12 modification rather than apply for a completely new permit. WWRSD agreed to support their 13 efforts in that manner. 14 15 We understood that they would start with 1 line and 1 haul in July 2015, then add additional lines and hauls in the second phase, and then add additional lines and hauls in the third phase. 16 At the end of the third phase Sugar Creek indicated it would be purchasing approximately 17 275,000 gpd of water from Cambridge City and producing 200,000 gpd sewage flow to the 18 District's collection system. At that point they would be the largest volume customer of both 19 20 Cambridge City and WWRSD. Sugar Creek also informed us that the pretreatment system would have an equalization tank, so 21

- the peak flows generated within the processing plant and sent to the pretreatment system may
- 2 be as high as 400 gpm, but those internal peak flows would be sent to the equalization tank.
- 3 The flow would then be pumped out of the equalization tank through their pretreatment
- 4 system at a much lower flow rate of approximately 167 gpm, and then discharged to the
- 5 WWRSD system at that same lower flow rate. (See Exhibit MW-3)

### 6 Q: WHAT OTHER FACTORS DO YOU BELIEVE ARE RELEVANT REGARDING SERVICE TO SUGAR

#### CREEK?

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8 **A:** WWRSD's collection system in the general area of Sugar Creek is a gravity sewer system, but

all sewage from the Gateway Industrial Park flows to a lift station which has a certain capacity.

This same lift station also serves all other entities in the Industrial Park. Sugar Creek requested

up to 200,000 gpd capacity, so we needed to verify that the existing infrastructure in the Park,

including the lift station, was adequate. We first verified that the existing sewer line that Sugar

Creek would discharge to is 12" diameter and has a capacity of approximately 700 gpm. We

then reviewed the IDEM Design Summaries for the lift stations to check rated pump capacity.

15 The Industrial Park Lift Station pumps were rated for 240-280 gpm, which would accommodate

both Sugar Creek's flows of 167 gpm plus a small amount from their restrooms as well as the

flows from all of the other Industrial Park customers. If the cumulative flows had exceeded

either the line or the lift station flow limits, we would not have been able to approve and sign

the requested capacity certification for Sugar Creek. Therefore, based on the information Sugar

Creek provided regarding their equalized flow rates, we did not see or anticipate any flow

- issues and WWRSD issued the capacity certification for Sugar Creek's IDEM construction permit
- 2 application in January 2015.
- 3 Q: ARE YOU FAMILIAR WITH THE LIFT STATIONS IN THE GATEWAY INDUSTRIAL PARK?
- 4 A: Yes. All sewage discharged by the customers inside and outside the Park is eventually
- 5 pumped directly to the manhole located directly outside the WWRSD WWTP. Flows along
- 6 Frontage Road and northeast of the Park are pumped from the Frontage Road lift station to the
- 7 gravity sewer in the Park. All flows from the Park plus the Frontage Road lift station flows are
- 8 pumped from the Industrial Park lift station to the Capitol Hill lift station. The Capitol Hill lift
- 9 station pumps that sewage directly to the WWRSD WWTP.
- 10 Q: WHO WAS RESPONSIBLE FOR THE DESIGN, ENGINEERING AND ULTIMATELY THE
- 11 INSTALLATION OF THE COLLECTION LINES AND LIFT STATIONS FOR THE INDUSTRIAL PARK?
- 12 **A:** As I recall, the Whitewater River Economic Council (WREC) was an economic development
- arm of Wayne County and was responsible for development of the Industrial Park. WREC hired
- 14 GRW Engineering to provide the planning, design engineering, and construction management
- and inspection of the collection sewers, lift stations, force mains, water treatment plant, water
- mains, water tower, roads, bridges, and other infrastructure in the Park and to the respective
- 17 utilities. WWRSD agreed to own and operate the wastewater infrastructure after the project
- was completed, but did not oversee the design or construction of the project.

- 1 Q: PLEASE EXPLAIN YOUR UNDERSTANDING OF WHAT THE COUNTY'S DESIGN AND ACTUAL
- 2 INSTALLED LINES AND LIFTS STATIONS ALLOW AS FAR AS THE FLOWS FROM THE INDUSTRIAL
- 3 **PARK.**
- 4 A: The Industrial Park lift station was designed to handle flows between 240 to 280 gpm, and
- 5 pump through a 6" PVC SDR-21 force main to the Capitol Hill lift station. The Capitol Hill lift
- 6 station was designed to handle flows of 350 gpm, and pump through a 6" PVC SDR-21 force
- 7 main to the WWTP.
- 8 Q: WERE THERE ANY ISSUES OR PROBLEMS EXPERIENCED BY WWRSD WHEN THE FORMER
- 9 REALLY COOL FOODS OR OTHER ANY OTHER INDUSTRIAL PARK CUSTOMERS WERE SENDING
- 10 THEIR SEWAGE FLOWS TO WWRSD?
- 11 **A**: I do not recall any capacity or flow issues from RCF or any other industrial park customers. I
- do recall that there were concerns regarding high strength waste and fats, oils and grease (FOG)
- as the RCF effluent flow was high temperature and FOG would flow through their grease traps
- and then coagulate in the lift stations or at the WWTP, which could cause maintenance issues
- and equipment failures. The high BOD loadings caused some operational issues at the WWTP,
- but WWRSD timely addressed those as they arose, and issued a Notice of Violation to RCF.
- 17 Q: WHEN DID WWRSD BEGIN TO EVALUATE AND DETERMINE THAT IT NEEDED TO UPGRADE
- **18 AND EXPAND ITS PLANT AND SYSTEM?**
- 19 **A**: Sometime in 2008.

- 1 Q: HOW FAR ALONG WAS WWRSD IN THIS EVALUATION AND DESIGN PROCESS WHEN
- 2 SUGAR CREEK FIRST CAME IN TO THE PICTURE?
- 3 A: As outlined above, a PER had been prepared in August 2009 and WWRSD was ready to
- 4 proceed with a WWTP expansion for the Really Cool Foods project before Really Cool Foods
- 5 shut down. That PER was funded by an EDIT grant from the Wayne County Economic
- 6 Development Corporation, with the anticipated outcome of WWRSD and Wayne County
- 7 working together to provide wastewater capacity for anticipated growth in, and to lure
- 8 companies to, the Industrial Park.
- 9 Q: WAS WWRSD REQUIRED TO MAKE ADJUSTMENTS IN ITS PLANNING PROCESS TO
- 10 ACCOMMODATE SUGAR CREEK'S FLOW NEEDS?
- 11 **A:** No. The original PER prepared in August 2009 included an option to expand the WWTP to
- 12 1.2 MGD. When we received the County's letter dated August 12, 2013 indicating the
- wastewater treatment needs of the Gateway Industrial Park (Exhibit MW-4), we already had a
- plan in place to accommodate those additional flows, including Sugar Creek's flow need of up
- to 400,000 gpd, and still would have had WWTP capacity to spare for additional development.
- 16 Because of this prior planning we were able to quickly prepare an update of the PER to meet
- 17 SRF guidelines.
- 18 Q: PLEASE EXPLAIN ANY PRACTICAL LIMITATIONS ON HOW YOU WENT ABOUT ADJUSTING

### 1 AND DESIGNING THE PLANT EXPANSIONS.

- 2 A: We tried to balance the needs of both Sugar Creek and Wayne County as far as future
- 3 capacity needs with the revenue sources that would actually be realized from the customers
- 4 who would be using the WWTP and collection system. This means we could not significantly
- 5 over build the WWTP and ask the current customers to pay for any unreasonably needed
- 6 excess capacity. In fact, we had numerous discussions and communications with SRF and IDEM
- 7 to even allow this WWTP expansion project to be sized at 1.2 MGD, as IDEM was concerned
- 8 that the proposed plant expansion to 1.2 MGD was excessive (see Exhibit MW-5). We
- 9 repeatedly stated to Sugar Creek, Wayne County officials, and in public meetings that everyone
- wanted additional capacity but nobody would commit to pay for that capacity. Both Sugar
- 11 Creek and the County refused to offer any type of capacity charge to reserve a future additional
- 12 WWTP capacity.
- 13 Q: WHAT LEVELS OF ADDITIONAL CAPACITY WAS SUGAR CREEK INDICATING IT WANTED AND
- 14 NEEDED AND OVER WHAT TIME FRAME?
- 15 **A**: When WWRSD was asked to file the capacity certification for Sugar Creek's construction
- permit application, they informed us they would be starting up operations and ramp up to a
- 17 flow of 200,000 gpd (See Exhibit MW-6). They mentioned that the pretreatment system would
- be sized for a future capacity of 300,000 gpd, but that would be in the future and would not
- occur until well after WWRSD had completed their WWTP expansion and then allow us
- 20 together to address the Industrial Park lift station and force main. They also indicated that the

- 1 equalized flow rate out of the pretreatment system would increase to about 200-210 gpm if
- and when they expanded to 300,000 gpd flow level in the future. Based upon Sugar Creek's
- 3 representations of those future flows, WWRSD also advised Sugar Creek that they would need
- 4 to request another IWP modification. This would have prompted a new capacity certification
- 5 from WWRSD for the flow increase to 300,000 gpd. Then at some point in later 2016 they
- 6 indicated they now wanted to expand those flows from 200,000 to 400,000 gpd. That, I
- 7 believe, was the basis for the differing flow numbers used as part of their more recent
- 8 suggestion to WWRSD to now abandon the WWTP expansion and pump all flows to
- 9 Connersville.

#### 10 Q: WHEN DID SUGAR CREEK BEGIN ACTUAL COMMERCIAL PRODUCTION AND REGULAR

## 11 FLOWS TO WWRSD?

- 12 **A:** As noted in Mr. Holbrook's testimony, Sugar Creek started actual commercial production in
- the Summer of 2016. Sugar Creek started sending flows to WWRSD around August 2015, but
- 14 he stated this was based upon limited plant operations and was somewhat erratic. Following
- their initial start-up in August 2015 and after working out most of the operational hiccups, and
- having their pretreatment system in operation, they submitted an application for an IWP
- 17 renewal from IDEM in May 2016 (see Exhibit MW-7). However, WWRSD was not asked to
- provide any revised or new capacity certification because Sugar Creek's IWP application
- 19 continued to represent a total daily flow of 200,000 gpd (See Exhibit MW-7, p. 16). We
- 20 therefore relied upon their sewage flows and flow rates submitted in their IDEM applications,

- specifically the diagrams labeled Sugar Creek Packing Co. Cambridge City Indiana Water Use
- 2 Flow Diagram listed below.
- 3 Q: PLEASE PROVIDE WHAT DETAILS SUGAR CREEK INDICATED THEY NEEDED AS FAR AS
- 4 WASTEWATER SERVICES FOR THEIR NEW PLANT.
- 5 **A:** We obtained or were furnished the following details:
- 6 1) Exhibit MW-3 is the CCI Wastewater Review Meeting handout, from a meeting with
- 7 Sugar Creek on November 5, 2014. This document described the design parameters of
- the pretreatment system with a Present flow of 200,000 gpd and flow rate of 167 gpm.
- 9 2) Exhibit MW-8 is the Water Use Flow Diagram furnished by Sugar Creek in their 2015 IWP
- modification. This depicts a total water usage of 290,000 gpd and a total wastewater
- 11 flow to WWRSD of up to 211,000 gpd. No peak flow rates are shown.
- 12 3) Exhibit MW-9 is the Water Use Flow Diagram furnished by Sugar Creek in their 2016 IWP
- renewal application. This depicts a reduced total water usage of 270,000 gpd and a
- reduced total wastewater flow to WWRSD of up to 200,000 gpd. No peak flow rates are
- shown.
- 16 Q: AS SUGAR CREEK CAME ON LINE WITH THEIR NEW, LARGE PLANT AND BEGAN TO RAMP
- 17 UP PRODUCTION DID YOU OR SUGAR CREEK EXPECT ANY ISSUES?
- 18 A: Yes, we both did, as they were discussed in our meetings back in 2014. But as noted we
- agreed to work together to address them.

# 1 Q: WHAT WERE THE FIRST ISSUES THAT YOU RECALL COMING UP?

A: I recall the first issue occurring in early August 2016. The District became aware of apparent 2 flow capacity issue(s) with the Industrial Park Lift Station pump(s) on or around August 10, 3 4 2016. On August 12, 2016 we attempted to perform drawdown testing of the lift station to determine the effective pumping capacity. However, the lift station wet well was surcharged 5 and the testing could not be performed. 6 7 This information was provided to the District Board at their meeting on August 15, 2016. The 8 Board authorized further investigation of the situation at that meeting. Sugar Creek had apparently hired Strand Associates to design lift station improvements (to increase Industrial 9 10 Park LS to 280 GPM) and their design was apparently discussed with the Indiana Finance Authority on September 2, 2016. I met with WWRSD, Sugar Creek and Strand Associates on 11 September 16, 2016 to discuss the pumping capacity issues. At that meeting Sugar Creek 12 offered to pay the cost of temporary pumping with above ground diesel pumps while a 13 14 permanent long-term solution was being designed and constructed. I presented a summary of the meeting to the Board at their meeting on September 19, 2016. At the meeting I stated "The 15 Board can authorize us to evaluate these options and present our findings at the October Board 16 meeting. In the interim, Sugar Creek will request the authorization to proceed with a 17 temporary pumping option, which will add above ground pumps at both lift stations, in an 18 19 effort to increase flows. Sugar Creek has offered to pay the cost of the temporary pumping while the long term solution is being designed and constructed. We recommend the Board 20

- 1 consider this interim solution for approval at tonight's meeting." I believe those meeting
- 2 minutes will show that the Board then approved Sugar Creek's request to install and pay for
- 3 temporary pumping.
- 4 On October 6, 2016 we met with Alex Hauck of Sugar Creek and toured both lift stations to
- 5 review Sugar Creek's plan and discuss how Sugar Creek would connect temporary pumps.
- 6 At the October 17, 2016 Board meeting we presented a technical memorandum and the results
- 7 of our evaluation. The Board voted to include the budget amount for the recommended
- 8 Industrial Park lift station project in the financial analysis. They also noted they had previously
- 9 authorized Sugar Creek to install temporary pumping but Sugar Creek had not proceeded. I
- don't recall Sugar Creek giving the District the reason they did not install the temporary pumps,
- and was surprised they didn't because we had worked together to quickly identify a solution,
- which they had offered to proceed with.
- 13 Those were the issues and solutions discussed that I recall prior to the subsequent 2017 lift
- 14 station incidents.
- 15 Q: FOLLOWING THE JANUARY 2017 INCIDENT, WHAT STEPS DID WWRSD TAKE TO ADDRESS
- 16 ANY ISSUES?
- 17 **A:** The District notified us of an apparent issue with the Industrial Park Lift Station on or about
- 18 January 17, 2017. We determined the existing pumps were operating but appeared to be
- operating at less than their rated capacity. Sugar Creek represented that their flows were not
- 20 near their 200,000 gpd capacity, and requested WWRSD resolve the issue.

On January 18, 2017 we contacted a pump manufacturer in an attempt to provide new pumps 1 capable of meeting the original design parameters of 240-280 GPM. We identified a specific 2 Xylem pump (Flygt Model NP-3127 with 11 HP motor) that would be suitable for the existing 3 electrical service panel and starters, rated for 280 GPM at 89 feet of head. We discussed 4 pricing, terms and accelerated delivery schedule with the manufacturer on January 19<sup>th</sup>. 5 On January 20<sup>th</sup> we met with the Xylem representative at the lift station site, for the rep to note 6 dimensions and verify that the pumps would fit in the wet well, and the District signed the 7 quote in the amount of \$24,852.00 to purchase the pumps and proceed with installation. On 8 February 3<sup>rd</sup>, the pump controllers were delivered and installed in the control panel. On 9 February 6<sup>th</sup>, the Xylem pumps were delivered and installed. Start up and training was provided 10 to WWRSD and the pumps were placed in operation that day. The cost from Turpin Electric to 11 install the controllers and pumps was \$2,521.94. 12 At each critical step we kept Sugar Creek up to date on these above noted efforts. I directly 13 14 communicated with SCPC (Alex Hauck, Ed Rodden and Victor Dearman) several times 15 throughout the process through calls and multiple emails sent on January 23, 2017, January 25, 2017, February 2, 2017, and February 3, 2017. 16 Following the installation of these new Industrial Park LS pumps, the District also proactively 17 inspected and serviced the pumps and motor starters at the Capitol Hill Lift Station. WWRSD 18 had new motor starters installed, rebuilt the old starters for spare inventory, and had new 19 20 impellers installed on each pump to restore those pumps to the original design parameters of approximately 350 GPM. The electrical improvements and pumps with new impellers were 21

- installed on March 6, 2017 and March 22, 2017. That work was completed by Turpin Electric at
- 2 a cost of \$12,443.90.
- 3 Q: SINCE THE MAY 2017 INCIDENT, WHAT STEPS HAS WWRSD PURSUED TO IDENTIFY ANY
- 4 ISSUES AND CONCERNS?
- 5 A: WWRSD first became aware of the problem when notified by Sugar Creek late on May 22,
- 6 2017. On May 23, 2107 the District immediately called for emergency service from the pump
- 7 company Xylem, who installed the new pumps in February 2017. A pump draw down test was
- 8 conducted on May 23<sup>rd</sup> to determine the effective pumping capacity of the new pumps. The
- 9 testing revealed an influent flow of approximately 120 GPM with no flow coming from the SCPC
- 10 pretreatment system (but other SCPC connections were still discharging). The pumps were
- then run individually and the measured pumping rate of each pump was approximately 135
- 12 GPM. The Xylem field service technician arrived on site the morning of May 24<sup>th</sup> to pull the
- pumps and investigate the issue. It was determined that the pumps had somehow rotated off
- the discharge connection. The Xylem field service technician pulled the pumps and re-installed
- them. Once the discharge connection was sealed at approximately 11:15 am, the SCPC
- 16 personnel on site (Victor Dearman and Scott) instructed their personnel to start discharging
- 17 from their pretreatment system again. Thereafter WWRSD ordered new gaskets for the pumps
- out of an abundance of caution. The Xylem field service technician delivered the gaskets and
- installed them on Memorial Day, May 29, 2017. Turpin Electric's bill for these issues was
- 20 \$1,799.90.

While I was on site on May 24<sup>th</sup>, Victor Dearman discussed Sugar Creek's pretreatment system 1 in greater detail. He noted that their flow is not equalized at the discharge end of the 2 pretreatment system, but rather near the front of the system. They receive up to 400 GPM into 3 the equalization tank and then run their WWTP so that it discharges at a flow rate of between 4 200 to 220 GPM, or higher, which is much more than the 167 gpm levels they had represented 5 to the District. Therefore, their total sewage flow rate to the LS could be 320-340 GPM, or even 6 greater, which is much greater than the 280 GPM pumping capacity of the lift station. 7 After discussing the new revelation of this flow rate information with Victor, we then informed 8 9 WWRSD of what we had just learned and our findings. We were instructed to proceed with evaluating and reviewing options to provide new additional emergency pumping capacity to 10 meet the apparent new Sugar Creek flow rate conditions of approximately 350 to 400 GPM. 11 Due to the friction losses inherent with the existing smaller diameter HDPE force main, it was 12 difficult to find pumps that would enable flows over 400 GPM. During our expedited evaluation 13 process we also went back and reviewed the Strand Associates engineering report that was 14 15 prepared for Sugar Creek. Our evaluation appeared to be consistent with Strand's findings. We also felt it wise to corroborate the incoming Sugar Creek flows to the Industrial Park lift 16 station. As neither of the existing lift stations had flow meters installed on the pump discharge, 17 the WWRSD authorized us to proceed with installing flow meters in the 12" sewer in the 18 Industrial Park at two locations: one meter immediately upstream of Sugar Creek and one 19 20 meter immediately downstream. The meters were installed and calibrated by Gripp, Inc. on 21 June 5, 2017. We began recording flows around approximately noon that date.

- 1 The Board also declared an emergency situation, reviewed the evaluations and
- 2 recommendations at a Board meeting, and authorized the rental and installation of two diesel
- driven bypass pumping units on June 7, 2017. These units were installed on June 15, 2017 and
- 4 have been in operation since their installation. These units are pumping between 350 and 400
- 5 GPM as recorded on their flow meters. The diesel pump rental quote was \$1,118.60 per
- 6 month, plus the cost of diesel fuel. Turpin Electric's bill for the diesel pump installation was
- 7 \$1,688.06.
- 8 The attached Exhibit MW-10 shows the meter locations, the recorded flows in the 12" sewer,
- 9 the peak flow rate recorded each day, and the recorded flow and pump run time of the diesel
- 10 pumps.
- 11 Q: PLEASE DESCRIBE WHAT YOU HAVE DISCOVERED AFTER REVIEWING THE SUGAR CREEK
- 12 FLOW NUMBERS PROVIDED IN RESPONSE TO CERTAIN DATA REQUESTS.
- 13 A: Following review of Sugar Creek's revised flow estimates (see Exhibit MW-11), I believe they
- 14 are just that estimates. We first discovered that softener regen water is included in Sugar
- 15 Creek's estimated flows discharged to WWRSD, but was not disclosed or included in their IWP
- application (see Exhibit MW-7) or in their Water Use Flow Diagrams shown in Exhibits MW-8
- and MW-9. This flow ranges from approximately 10,000 gpd to 56,000 gpd. We cannot
- ascertain whether that flow goes through the pretreatment system or is discharged directly to
- 19 WWRSD. We also discovered their calculation of their estimated total flow discharged to
- 20 WWRSD is sometimes over 300,000 gpd and has been as high as 331,000 gpd.

- 1 Q: PLEASE DESCRIBE WHAT THE RESULTS HAVE BEEN OF THE WWRSD GRIPP, INC'S FLOW
- 2 MONITORING THAT STARTED JUNE 5, 2017.
- 3 A: We have also reviewed the flow metering information from the Gripp, Inc. flow metering
- 4 that is being conducted in the Industrial Park. The flow metering is being conducted with ISCO
- 5 area velocity flowmeters, which take readings every five minutes for a total of 288 readings per
- 6 day. The flow metering data summary is shown in Exhibit MW-10. The upstream flow meter
- 7 records all flow from all customers upstream of Sugar Creek, and the downstream flow meter
- 8 records all flow from all customers upstream of and including Sugar Creek. The total flow and
- 9 peak flow rate from Sugar Creek is calculated by subtracting the upstream flow from the
- downstream flow. We also noted the peak flow rate from Sugar Creek each day. Our review of
- the data is summarized below:
- 1) The total flow from Sugar Creek ranges from a minimum of 77,385 gpd on 6/11/2017 to
- a maximum of 370,903 gpd on 7/13/2017. Over the metering period, Sugar Creek's total
- 14 flow averaged a little more than 270,000 gpd.
- 15 2) The peak flow rate from Sugar Creek ranges from a minimum of 237.8 gpm on
- 16 6/18/2017 to a maximum of **622.5 gpm** on 7/16/2017. Over the metering period, Sugar
- 17 Creek's peak flow rate averaged just under 400 gpm.
- 18 Q: MR. WESSLER, WHAT CONCLUSIONS DO YOU DRAW FROM THE FLOW DATA PROVIDED BY
- 19 SUGAR CREEK AND THE CORROBORATING MONITORING DATA FROM GRIPP, INC.?
- 20 **A:** The data is very alarming and of great concern to us. First, the daily flows from Sugar Creek

are approximately 70,000 gpd greater than the capacity they requested and provided in their 1 applications. Of graver concern is Sugar Creek's peak flow rate. Their peak flow rate has 2 averaged almost 400 gpm, and their peak flow rate has regularly exceeded the lift station pump 3 rated capacity of 280 gpm on every day except for two days. This data clearly shows the cause 4 behind the lift station pump issues and sewer system surcharges – the lift station pumps could 5 not handle Sugar Creek's peak flow rate. The data also confirms what Victor Dearman told us -6 namely that Sugar Creek had been flowing at well in excess of their represented flow rates. 7 This effectively has overwhelmed the lift station capacity. I am somewhat surprised given Sugar 8 9 Creek's own knowledge from their Strand Associates analysis indicating the limitations of the lift station. 10 In addition, we noticed that following the installation of the diesel driven bypass pumps at both 11 lift stations on June 15<sup>th</sup>, Sugar Creek's flow increased. They have been above the 200,000 gpd 12 flow a total of 51 out of the 60 days since June 15<sup>th</sup>, and their average discharge flow has 13 14 increased to 277,000 gpd. We also noticed that even with a pumping rate of 400 gpm from the 15 diesel pump at the Industrial Park lift station, the sewer system has surcharged during this metering period due to the high peak flows. 16 Also, this flow metering data verifies the decision the WWRSD Board made on July 17, 2017, 17 continuing their plans for a permanent long-term solution to handle these peak flows and 18 maintain service to the existing customers, plus add capacity for the undeveloped property in 19 20 the Industrial Park, to build a new higher capacity Industrial Park lift station and a new force main. WWRSD engaged Wessler on July 17, 2017 to proceed with the SRF PER Amendment and 21

- the engineering design of the Industrial Park Lift Station project. This project will be
- 2 constructed in sequence with the WWTP expansion project, such that the lift station project
- 3 will be complete immediately following the start-up of the new expanded WWTP.
- 4 Finally, I believe that the above ground pumps have provided the District and its customers,
- 5 including Sugar Creek, with a pumping solution that will work reliably until the new Industrial
- 6 Park lift station project is completed. The successful installation and operation of the above
- 7 ground pumps shows that Sugar Creek's claimed losses may not have occurred if they would
- 8 have proceeded with installing the temporary pumps that they obtained authorization to install
- 9 back in October 2016, but for some reason chose not to proceed with.
- 10 Q: MR. WESSLER, HAVE YOU MADE ANY COST ESTIMATES FOR WWRSD TO ADDRESS ANY OF
- 11 THESE RECENT ISSUES RELATED TO THE INCREASED SUGAR CREEK FLOWS?
- 12 **A:** Yes, those cost estimates are detailed in attached Exhibit MW-12, but in total we estimate it
- has cost the WWRSD to-date approximately \$85,000 to replace the Industrial Park lift station
- pumps, restore the Capitol Hill lift station pumps, install flowmeters, and install and operate the
- 15 emergency diesel pumps. For long term improvements, approximately \$1.9 Million is budgeted
- for a new higher capacity Industrial Park lift station and force main, which has been publicly
- discussed at District Board meetings, and is included in the preliminary rate analysis for the
- 18 total project cost.
- 19 Q: MR. WESSLER, ARE YOU FAMILIAR WITH AND HAVE YOU REVIEWED ANY MATERIALS

RELATED TO THE CONNERSVILLE OPTION BEING PROMOTED BY THE COUNTY? 1 A: Yes. We have reviewed the "Strand update" cost estimate (see Exhibit MW-13) and have 2 been advised of the proposal to pump all raw sewage from the WWRSD collection system to 3 4 Connersville. A new lift station sized for 3.5 MGD would be located at the WWRSD WWTP and approximately 11.4 miles of 18" and 22" force main would be constructed and connect to the 5 Connersville sewer system. The existing WWRSD WWTP would be demolished. Connersville 6 would treat the wastewater. WWRSD would retain ownership of the WWRSD collection system 7 as well as the new lift station and force main to Connersville, and be responsible for operation 8 9 and maintenance. WWRSD would be billed by Connersville based on the volume of wastewater pumped to Connersville. WWRSD would be responsible for billing its customers. 10 We have also prepared cost opinions for use by the District's financial advisors, and reviewed 11 various preliminary rate studies prepared for the Connersville option, including the most recent 12 study prepared by O.W. Krohn & Associates and included in Mr. Krohn's testimony. 13 14 Q: PLEASE PROVIDE YOUR THOUGHTS REGARDING WHAT WOULD BE INVOLVED, FROM AN 15 ENGINEERING STANDPOINT, FOR WWRSD TO ACTUALLY PURSUE AN OPTION TO CONNECT 16 WITH CONNERSVILLE. 17 A: The WWRSD Board has already determined to proceed with the WWTP expansion project 18 for the reasons set forth elsewhere in my and Mr. Krohn's testimony. However, from a pure 19 20 theoretical standpoint if I were to be asked to investigate the Connersville option, I would 21 advise WWRSD to proceed as follows:

The first step would be to negotiate terms and conditions with the City of Connersville, Wayne County, and Sugar Creek, and execute an Agreement with each party before any more costs are incurred. It would be necessary to promptly reach agreements with Wayne County and Sugar Creek as they are the primary proponents of the Connersville option, and clearly Sugar Creek and the flows and revenues associated with their waste treatment are a key component. WWRSD would also have to obtain written permission from both Wayne and Fayette County Commissioners to install a new sewer force main through each County, and thereafter identify and pursue necessary rights of way or easements.

2) During the PER phase, the existing WWRSD raw sewage pump station at the WWTP would need to be evaluated for reuse versus constructing a new pump station. A new fine screen and back-up grinder ahead of the pumps and a new emergency back-up generator would also be evaluated. Optional force main routes to Connersville would be evaluated and cost estimates prepared to determine the most cost-effective route. To justify the design flows for SRF funding, written commitments for future discharge flows would need to be obtained from current or potential customers in the Industrial Park and included in the PER. I anticipate this could pose problems, as the County proposed a 1.75 MGD capacity with Connersville and SRF will require a detailed justification for the increased flows.

- 3) If the selected force main route includes construction across private easements or upon previously undisturbed land, an archaeological reconnaissance must be completed for the Environmental review and State Historic Preservation Officer approval.
  - 4) Following SRF approval of the PER, the design phase would involve the preparation of design plans and specifications for the selected pump station option and force main route.
  - 5) Upon construction permit approval and SRF authorization, the project would be publicly bid. SRF must issue construction contract award approval, and the SRF loan must be closed on prior to starting construction.
    - 6) Upon completion of construction and commissioning of the Plant pump station and force main, the existing WWRSD WWTP would be demolished.
  - 7) As identified and discussed above, the currently proposed Industrial Park Lift Station upgrade would have to be included in any project to be able to accommodate the higher Sugar Creek flows. The Industrial Park Lift Station would need to be constructed at the same time as any force main to Connersville, but could not become operational until any new pumping station(s) and force main to Connersville were operational.
- 17 Q: WOULD THIS INVOLVE DECOMMISSIONING THE EXISTING WWRSD WWTP AND
- 18 SCRAPPING THE EXISTING PLANS, PERMITS, BIDS AND APPROVALS ALREADY SECURED BY
- 19 **WWRSD?**

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20 **A:** Yes.

- 1 Q: YOU HAVE LISTED SEVERAL STEPS NECESSARY TO PURSUE THIS OPTION. WOULD YOU
- 2 ESTIMATE THE AMOUNT OF TIME YOU BELIEVE THIS WOULD TAKE AS WELL AS AN
- **3 APPROXIMATE ADDITONAL COST?**
- 4 A: As stated at numerous public meetings, I estimate it would take approximately 3 years to
- 5 complete the Connersville option. I estimate the total additional cost for WWRSD to reach the
- 6 same point they are now with the WWTP Expansion (bids received, ready to award the
- 7 construction contract), plus acquire the necessary easements, to be \$1.2 million.
- 8 Q: MR. WESSLER, HAVE YOU REVIEWED THE FINANCIAL ANALYSIS AND TESTIMONY
- 9 PREPARED BY MR. KROHN IN THIS MATTER ON BEHALF OF WWRSD?
- 10 **A:** Yes.
- 11 Q: DO YOU AGREE WITH HIS ASSUMPTIONS AND GENERAL CONCLUSIONS AOUT THE BUILD
- 12 OPTION AS BEING THE BEST OPTION?
- 13 **A:** Yes, I agree that the build option we have proposed and vetted over the last several years
- still remains the most flexible and viable option. There are far too many unknowns and delays
- related to the Connersville option to make it reasonable. Plus with the newly discovered peak
- 16 flow information from Sugar Creek, we need to address the Industrial Park lift station capacity
- 17 constraint issue now, and not later. This requires a working treatment plant that is available to
- accept and treat these higher flows when the lift station upgrades are completed. The only

- option that provides for this necessary timing is the "build" option. Further, I also believe that
- the other benefits and factors identified in Mr. Krohn's testimony show that this not only saves
- 3 WWRSD customers (and new industrial park entities) money, but ensures they will all see any
- 4 future benefits as growth continues in the area.
- 5 Q: MR. WESSLER, YOU HAVE WORKED CLOSELY WITH WWRSD AS WELL AS OTHER PUBLIC
- 6 UTILITIES OVER THE LAST 20 YEARS, DO YOU HAVE AN OPINION REGARDING WWRSD'S
- 7 ABILITY TO OPERATE AND MANAGE THIS PARTICULAR UTILITY?
- 8 **A:** Yes, I do. The Board of Trustees and the employees are all dedicated, hard working people.
- 9 The Board is made up of volunteer, appointed representatives from the major communities and
- so there is direct accountability. Throughout the years I have worked with the Board and the
- employees they have all shown a level of professionalism and desire to provide the best service
- possible and operate as efficiently and effectively as they can to maintain the lowest rates
- 13 possible. They have engaged qualified outside professionals as needed and always prompt to
- address any issues that arise consistent with the efforts I testify to in this matter and discussed
- above. I do not believe this utility is a troubled or incapable utility as Sugar Creek has alleged in
- its Complaint. WWRSD should be allowed to go forward with its business operations and
- pursue the decisions made by this duly appointed and representative Board of Trustees.

# IV. SUMMARY

- 18 Q: PLEASE SUMMARIZE YOUR TESTIMONY FOR THE COMMISSION.
- 19 **A:** In summary, I believe that WWRSD has capably and ably served its customers for over thirty

years. WWRSD has been consistently and proactively pursuing necessary plant upgrades and 1 expansions since 2008. When Sugar Creek came to the Gateway Industrial Park, WWRSD 2 supported their efforts to bring on-line the new and very large plant. We all knew there would 3 4 be some issues as Sugar Creek ramped up its operations. WWRSD has been addressing each of the issues as they have come up. Further, WWRSD has also been attempting to pursue 5 reasonable and cost effective upgrades and expansions. Because of incomplete promises or 6 7 delays requested by Sugar Creek and then the County, WWRSD has been severely delayed in being able to remedy the issues. 8 9 Unfortunately, the problems experienced of late have been the result of a twofold problem. First, as the data shows, Sugar Creek has sent excessive flows into the system well beyond what 10 they told us about. Second, the industrial park lift station inherited by WWRSD was never 11 designed to accommodate those levels. We have an approved and financed plan to address the 12 problems faced by Sugar Creek. We also believe it is the most cost effective and viable, and can 13 - if this immediate litigation impediment is resolved, quickly move to resolve this with a 14 15 practical, cost effective solution. It will also address the newly discovered Sugar Creek higher flows and demands. I also see far too many issues and unknowns related to the conceptual 16 idea of sending flows to Connersville that have not been fully examined and vetted. Further, 17 based on Mr. Krohn's financial analysis and other noted risk factors with the unknown long 18 term rates from Connersville, I just cannot recommend to the WWRSD Board or its customers 19 20 that such an option is reasonable or in their best interest. I am not sure why Sugar Creek was really supporting that option given the lengths we have gone though in trying to meet their 21

1 growing needs, including granting them the right to install the backup pumps back in 2016 but

2 failing to do so and working out special IFA financing.

3 Regardless, because this is supposed to be a review of the District's capability to operate the

utility and whether this could be considered a troubled utility, I will simply summarize and say

that it certainly is not. The many efforts I have recounted in my testimony above clearly shows

that WWRSD is actively engaged and has tried very hard to work not only on the needs and

issues of an expanding service territory, but to also try to work with its customers and

community. Unfortunately, the delays and distractions raised by Sugar Creek and others have

only resulted in exacerbating the situation. WWRSD needs to be able to immediately move

forward with its plans and accept the bids it currently has, or they will unfortunately expire. If

that happens, the costs for rebidding this, or for that matter any other project going forward

will only increase and thus further increase the costs and ultimately the rates to WWRSD's

13 customers. This is not good for anyone involved.

Q: DOES THIS CONCLUDE YOUR TESTIMONY?

15 **A:** Yes.

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# (Exhibits MW-1 through MW-13 are provided in a separately filed Exhibit document).